"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYEYKOVA, I., arkhitektor

The best place in the house should be the child's study corner. Rabotnitsa 37 no.9:28 S '59. (MIRA 13:1)
(Children--Care and hygiene)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYEIKOVA, I.N., kand.iskusstvovedeniya

Rolled materials for finishing walls. Opyt stroi. 15:87-105 '58.
(Wallpaper) (MIRA 11:11)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYNYKOVA, I.N., starshiy nauchnyy sotrudnik

Equipment of foreign enterprises producing lightweight blocks. Opyt stroi. no.18:46-68 '58. (MIRA 12:1)
(Lightweight concrete) (Concrete blocks)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYEYKOVA, I.N., kand.iskusstvovedeniya

Coiled finishing materials for walls and floors. Opyt. stroi.
no.16:105-121 '58. (MIRA 11:9)
(Wallpaper) (Linoleum)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYEYKOVA, M.G., inzh.

Preparation and use of peat-manure-earth composts. Inform. biul. VDNKH no.2:27-28 F '64. (MIRA 17:8)

1. Laboratoriya mekhanizatsii primeneniya udobreniy Vsesoyuznogo nauchno-issledovatel'skogo instituta udobreniy.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYEYKOVA, V.N.

True congenital distichia. Trudy 1-go MMI 32:247-251 '64. (MIRA 18:5)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

LUPAKOV, I.S., kand.tekhn.nauk; VOYEYKOV, V.P., inzh.

Use of EI692 steel for work at 800 . Metalloved.i term.obr.met. no.2:49-51 F '62. (MIRA 15:3)
(Steel, Heat resistant) (Metals at high temperature)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYEYKOVA, E. D.

1324. Issledovaniye kataliticheskogo vosstanovleniya ionov serebra proyavlyayushchimi veshchestvami. [L.], 1954. 12s. s graf. zosm. (Gos. ordena Lenina optich. in-t im. S. I. Vavilova). 100 ekz. B. ts. - [54-52863]

SO: Knizhnaya Letopis, Vol. 1, 1955

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

KULICHENKO, V.F.; KOVYRSHINA, I.B.; VOYNYKOVA, I.S.; SHIRINA, K.F.; BUGEL'SKIY, Yu.A.

[Skillful hands; organization and work of the "Skillful Hands" club] Umelye ruki. Organizatsiia i soderzhanie raboty kruzhka "Umelye ruki." Izd-vo TsK VLKSM "Molodaia gvardiia", 1953. 286 p. (MLRA 6:11)
(Manual training)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

BERRI, R.Ya., dotsent; KOZYLYAYEV, P.A., dotsent; LUNTS, G.L., dotsent; LIBIN, M.L., starshiy prepodavatel'; ROZENTAL', M.I., assistent. Prinimali uchastiye: FUKS, B.A., prof.; VOYEYKOVA, S.V., dotsent; KOZITSIN, V.I., dotsent; TEUSH, V.L., dotsent. ANOSHINA, K.I., red.; KUZ'MINA, N.S., tekhn.red.

[Higher mathematics; instructions and control problems for students specializing in agriculture, fish culture, and forestry in upper-level correspondence schools (departments)] Vysshaia matematika; metodicheskie ukazaniia i kontrol'nye zadaniia dlia studentov sel'skokhoziaistvennykh, rybokhoziaistvennykh i lesokhoziaistvennykh spetsial'nostei zaochnykh vysshikh uchebnykh zavedenii (fakul'tetov). Pod red. G.L.Luntsa. Moskva, Gos.izd-vo "Sovetskaia nauka," 1958. 90 p. (MIRA 12:4)

1. Russia (1923- U.S.S.R.) Ministerstvo vysshego obrazovaniya. Metodicheskoye upravleniye.
(Mathematics)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

FAYERMAN, G.P.; VOYEYKOVA, Ye.D.

Study of the catalytic effect of sols on the reduction of silver ions with developers. Usp.nauch.fot.no.4:150-163 '55. (MIRA 9:4)
(Photography--Developing and developers)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYEYKOVA, Ye. D.

FAYERMAN, G.P.; VOYEYKOVA, Ye.D.

Mechanism of the catalytic action of development nuclei. Usp. nauch.fot. 3:174-182 '55. (MIRA 9:1)
(Photographic chemistry)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYEYKOVA, Ye. D.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYEYKOVA, Ye. D.

"Investigation of the Catalytic Reduction of Silver Ions by Developers." Cand Chem Sci, State Optical Inst, Leningrad 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13)
SO: Sum. No. 598, 29 Jul 55)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOIGT, J.

Voigt, J. and Heumann, J.

The preparation of monodispersed silver hydrosol free from protecting colloids

Z anorg. allgem. Chem., Vol. 164, 1927, pp. 409-19

Chem. Abs., Vol. 21, 3512

The usual Ag hydrosols are polydispersed and contain varicolored submicrons. Sols with uniformly colored particles can be prepd. It is necessary to have materials of the utmost purity and to use very dil. Ag solns. As starting material, a soln. of Ag_2O contg. 0.001% Ag was used. The method of seeding with Ag or Au nuclei was employed. The Au proved more favorable. Hydrazine sulfate or hydrate, formol and H_2O_2 were found suitable reducing agents. Solns. of P in ether were unsuitable because spontaneous nucleus formation takes place too readily.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOIGT, M.

Menzel, Henrich; Schulz, H.; Sieg, L; and Voigt, M.

Boric acids and alkali salts of boric acids. Supplement to communication VIII. IX. The system sodium tetraborate water.

Z. anorg. allegem. Chem., Vol. 224, 1935 pp. 1-22

Chem. Abs., Vol. 30, P. 7848-3

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYINOV, A.P.

124-11-13409

Translation from: Referativnyy Zhurnal, Mekhanika, 1957, Nr 11, p 155 (USSR)

AUTHOR: Voyinov , A. P.

TITLE: Steel-Wood Beams.
(Stalederevyanye balki.)

PERIODICAL: Nauk. pratsi Kharkivs'k. in-t inzh. komun. budivnitstva1956, Nr 7, pp 17-60 (Ukrainian paper with Russian résumé).

ABSTRACT: Theoretical and experimental investigations show that the carrying ability of a wooden beam can be increased by bonding a reinforcing steel flange onto it at temperatures of 160°-200° (C) with water-resistant bonding BF-2 or BF-4. The resulting prestressed condition increases the operational carrying strength of the beam. Computational procedure and test results are shown.
Bibliography: 5 references.

A. V. Dyatlov

Card 1/1

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYK, V.

A matter of national significance. Sov.profsoiuzy 6 no.17:16-17 D '58. (MIRA 12:1)

1. Predsedatel' Leningradskogo oblastnogo komiteta profsoyuza rabochikh mashinostroyeniya.
(Leningrad--Machinery industry) (Efficiency, Industrial)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

POLAND / Farm Animals, Honey-Bees Q-8

Abs Jour: Ref Zhur-Biol., No 2, 1958, 7258

Author : Jerzy Voyke
Inst : Not given
Title : Bees Do Not Differentiate Between the Larvae of Drones and Bees

Orig Pub: Pszczelarstwo, 1956, 7, No 5, 1-4 (Pol'sk).

Abstract: The author has observed instances of the establishment by bees of queen cells in honeycombs close to the brood of drones. The queen cells in these cases were in no way different from those usually used by queen bees. From a standard beehive, the entire brood was removed, and from other beehives three frames of sealed and three frames of unsealed broods of bees were brought in, as well as three frames of unsealed drone broods, which had been obtained

Card 1/2

POLAND / Farm Animals, Honey-Bees Q-8

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

Abs Jour: Ref Zhur-Biol., No 2, 1958, 7258

Abstract: from a colony of drones who had deposited their unfertilized ova in the cells meant for bees. Three days later, a queen cell was found in the honeycomb of the drones similar to those found in the honeycombs of the bees. In the second experiment, honeycombs with an unsealed brood from the drone colony and from another normal colony were introduced into a normal colony. Three days later, the bees established five queen cells in the bee broods, and six cells in the drones. Conclusion was drawn that bees, during the establishment of queen bee cells, do not distinguish between the broods of the bee and those of the drone.

Card 2/2

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

~~VOYKHANSKAYA, B. S.~~

37419. SUKHENKO, F. T. i VOYKHANSKAYA, B. S. Soderzhaniye Vitamina Cv Raznykh Sortakh Pomidorov.-- V Ogl. 2-Y Avt: B. O. Voykhanskaya. Sbornik Rabot Po Voprosam Gigiyeny Pitaniya. Novosibirsk, 1949, s. 128-33.-- Bibliogr: 8 Nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

SAMSONOV, G.V.; VEDENEYEVA, V.V.; SELEZNEVA, A.A.; VOYKHANSKAYA, E.Ye.

Ion exchange on anion exchangers involving penicillin. Zhur. fiz. khim. 37 no.4:725-729 Ap '63. (MIRA 17:7)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKAYA, N.F.

Visibility of photospheric flares on the solar disk. Uch.zap.LGU no.328:120-124 '65. (MIRA 18:10)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKAYA, N.F.

The broadening mechanism of Fraunhofer hydrogen lines. Astron.zhur. 42 no.5:1122 S-O '65. (MIRA 18:10)

1. Leningradskiy gosudarstvennyy universitet, kafedra astrofiziki.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

L 5432-66 EWT(1) GW

ACC NR: AT5026210 SOURCE CODE: UR/2703/65/000/328/0120/0124

31
B+1

AUTHOR: Voykhanskaya, N. F. 55

ORG: Astronomical Observatory, Leningrad State University (Astronomicheskaya observatoriya, Leningradskiy gosudarstvennyy universitet) 55

TITLE: On the visibility of photospheric flares on the solar disk 12,55

SOURCE: Leningrad. Universitet. Uchenyye zapiski, no. 328, 1965. Seriya matematicheskikh nauk, no. 39. Trudy Astronomicheskoy observatorii, v. 22, 120-124

TOPIC TAGS: solar photosphere, photosphere, solar flare, solar telescope, solar visible radiation, solar limb, solar disk, temperature gradient, temperature distribution, solar radiation scattering

ABSTRACT: An explanation is given for the visibility of flares for a 200-degree temperature difference between them and the photosphere and for their gradual disappearance in moving toward the center of the solar disk. The relative gradient $\Delta \Phi$ is calculated from the formula

$$\Delta\Phi = \Phi - \Phi_0 = \frac{C_2}{T}\left(1 - e^{-\frac{C_2}{\lambda T}}\right)^{-1} - \frac{C_2}{T_0}\left(1 - e^{-\frac{C_2}{\lambda T_0}}\right)^{-1},$$

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

where $\bar{\Phi}_0$ is the spectrophotometric gradient at the point of comparison. From this, the spectrophotometric gradient $\bar{\Phi}$ and the temperature T are found. The contrasts are calculated, assuming that the photosphere and a flare radiate as an absolutely black body. The visibility function V_λ is calculated by the formula

$$V_\lambda = P_\lambda^{\sec z}\eta_\lambda v_\lambda,$$

where P_λ is the transmission of the atmosphere, z the zenith distance of the sun, η_λ the light losses in the optics of the telescope, and v_λ the visibility function of the naked eye. A curve of V_λ for the solar telescope of the Astronomical Observatory of Leningrad State University is shown in Fig. 1. Corrections are made for light scattering by the atmosphere. It is found that as a flare moves toward the center of the solar disk its visibility is impaired and that it gradually disappears. The greater the area of the flare, the closer to the center it can be seen.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

L 5432-66

ACC NR: AT5026210

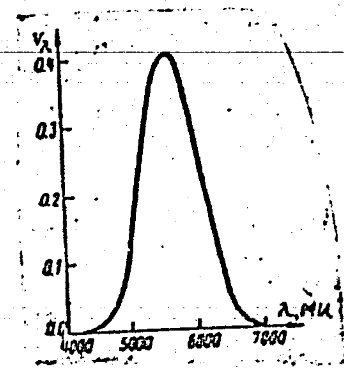

Fig. 1. Graph of function V_λ

Orig. art. has: 3 graphs, 2 tables, and 8 formulas.

SUB CODE: AA/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 001

Card 3/3

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

ACC NR: AR6028763 SOURCE CODE: UR/0269/66/000/005/0057/0057

AUTHOR: Voykhanskaya, N. F.

TITLE: Investigation of motion in solar facular plages using K_2 and K_3 lines of ionized Ca

SOURCE: Ref. zh. Astronomiya, Abs. 6.51.452

REF SOURCE: Solnechnyye dannyye, no. 9, 1965, 57-61

TOPIC TAGS: solar facula, solar plage, solar photosphere

TRANSLATION: The K_2 and K_3 Ca II lines from spectrograms obtained by the solar telescope of the Astronomical Observatory of the Leningrad State University (solar image diameter 203 mm, dispersion 0.98 A/mm) were used to measure facular rates v_r and turbulence rates v_t above the faculae. The obtained values of turbulence rates agree with the values previously obtained by V. A. Krat and V. L. Khokhlova. Gradient v_t in the chromosphere above the faculae was determined: it amounts to 7 m/sec per km. 7 references. M. G.

SUB CODE: 03 UDC: 523.75

Card 1/1

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, M. YE.

56-4-26/54

AUTHOR: Voykhanskiy, M.Ye.

TITLE: Selection Rules for Electromagnetic Transition in Deformed Nuclei (Pravila otbora dlya elektromagnitnykh perekhodov v deformirovannykh yadrakh)

PERIODICAL: Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol. 33, Nr 4, pp. 1004 - 1009 (USSR)

ABSTRACT: The selection rules for electromagnetic transitions in a badly deformed nucleus are theoretically derived. They read:

$\Delta\Omega = \Omega_f - \Omega_i$	$\Delta\Lambda = \Lambda_f - \Lambda_i$	$\Delta\Sigma = \Sigma_f - \Sigma_i$	$\Delta N = N_f - N_i$	$\Delta n_z = n_{zf} - n_{zi}$	Additional conditions
a) selection rules for N, n_z, Λ, Σ for electric transitions of the multipole order λ					
$\pm\lambda$	$\pm\lambda$	0	$\lambda, \lambda-2 \ldots -\lambda$	0	-
$\pm(\lambda - 1)$	$\pm(\lambda - 1)$	0	$\lambda, \lambda-2 \ldots -\lambda$	± 1	-
0	0	0	± 2	± 2	$\lambda = 2$
0	0	0	$0, \pm 2$	0	$\lambda = 2$

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56-4-26/54

Selection Rules for Electromagnetic Transition in Deformed Nuclei

$\Delta\Omega = \Omega_f - \Omega_i$	$\Delta\Lambda = \Lambda_f - \Lambda_i$	$\Delta\Sigma = \Sigma_f - \Sigma_i$	$\Delta N = N_f - N_i$	$\Delta n_z = n_{zf} - n_{zi}$	Additional conditions
b) selection rules for N, n_z, Λ, Σ for magnetic transitions of the multipole order λ					
$\pm\lambda$	$\pm\lambda$	0	$\lambda+1, \lambda-1, \ldots -(\lambda+1)$	$\pm$	-
$\pm\lambda$	$\pm(\lambda-1)$	±1	$\lambda-1, \lambda-3, \ldots -(\lambda-1)$	0	-
$\pm(\lambda-1)$	$\pm(\lambda-1)$	0	$\lambda-1, \lambda-3, \ldots -(\lambda-1)$	0	-
$\pm(\lambda-1)$	$\pm(\lambda-1)$	0	$\lambda+1, \lambda-1, \ldots -(\lambda+1)$	±2	$\lambda > 1$
$\pm(\lambda-1)$	$\pm(\lambda-2)$	±1	$\lambda-1, \lambda-3, \ldots -(\lambda-1)$	±1	$\lambda > 1$
0	0	0	±1, ±3	±1	$\lambda = 2$
0	±1	∓1	±1	0	$\lambda = 2$

The taking into account of the selection rule for N, n_z, Λ, Σ permits to clear up the probability discrepancies between the experimentally found and the theoretically calculated electromagnetic transitions. There are 4 tables and 2 Slavic references.

ASSOCIATION: Leningrad Pedagogical Institute imeni Gertsen (Leningradskiy pedagogicheskiy institut imeni Gertsena)

SUBMITTED: May 8, 1957 (initially), and June 30, 1957 (after revision)

AVAILABLE: Library of Congress

Card 2/2

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

SOV/48-23-2-15/20

21(7)

AUTHORS: Voykhanskiy, M. Ye., Listengarten, M. A.

TITLE: On the Selection Rules of Conversion Transitions (O pravilakh otbora pri konversionnykh perekhodakh)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 2, pp 238-243 (USSR)

ABSTRACT: The conversion probability is determined by the sum of the internal and external matrix elements $\langle M_e \rangle$ and $\langle U_\gamma \rangle$. Both matrix elements are subject to various selection rules. If there is a selection rule according to which the probabilities of internal conversion are not influenced in the case of strong decrease of the probability of γ radiation and external conversion, the nucleus largely contributes to conversion and the CIC (coefficients of internal conversion) depend on the nuclear structure. Therefore, CIC measurements may indicate the nuclear structure. Also the problem of selection rules for conversions on forbidden transitions is connected herewith. In the present paper the selection rule is given in a general form for transitions of any multipole order on the basis of asymptotic quantum numbers for the matrix

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

SOV/48-23-2-15/20

On the Selection Rules of Conversion Transitions

elements of $\langle M_e \rangle$ internal conversion in nonspherical nuclei. In addition, the selection rule for electric conversion transitions is given more accurately than in reference 5, taking into account the complete term for the nuclear currents of transitions. The influence exercised by the nuclear structure upon the CIC is determined by the quantity of parameter $\lambda = \langle M_e \rangle / \langle U_\gamma \rangle$. In the case of a magnetic 2^l-pole radiation the CIC depend only on one parameter λ_l^o, in the case of electric multipoles they depend on $\lambda_l^{(+1)}$ and $\lambda_l^{(-1)}$. The obtained selection rules, with respect to the asymptotic quantum numbers, for the matrix elements of inner conversion in nonspherical nuclei are given in table 1 (electric multipole order) and table 2 (magnetic multipole order). For electric dipole conversions it was found that they differ from all other radiation and conversion transitions at small energies by their spin. There are 2 tables and 11 references, 4 of which are Soviet.

Card 2/3

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

SOV/48-23-2-15/20

On the Selection Rules of Conversion Transitions

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gos. universiteta im. A. A. Zhdanova (Scientific Research Institute of Physics of Leningrad State University imeni A. A. Zhdanov)

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, M. YE.

56-4-39/54

AUTHOR: Voykhanskiy, M.Ye.

TITLE: An Asymptotic Selection Rule for the β-Disintegration of Deformed Nuclei (Asimptoticheskiye pravila otbora dlya β-raspada deformirovannykh yader) (Letter to the Editor)

PERIODICAL: Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol. 33, Nr 4, pp. 1054 - 1056 (USSR)

ABSTRACT: The selection rules of the asymptotic quantum numbers N, n_z, Λ, Σ, for β-transitions of any degree of interdiction ($\lambda > 1$) for the different interaction possibilities are theoretically derived. They are:

possibilities	matrix elements	$K = \Delta\Omega = \Delta I$	$\Delta\Lambda$	$\Delta\Sigma$	Δn_z	ΔN
S, V	$\int y_\lambda K(r)$	$\pm\lambda$	$\pm\lambda$	0	0	$\lambda, \lambda-2 \dots -\lambda$
V	$\int y_\lambda K(\nabla)$	$\pm\lambda$	$\pm\lambda$	0	0	$\lambda, \lambda-2 \dots -\lambda$
T, A	$\int y_{\lambda+1} K(\sigma)$	$\pm\lambda$ $\pm\lambda$ $\pm(\lambda+1)$	$\pm(\lambda-1)$ $\pm\lambda$ $\pm\lambda$	±1 0 ±1	±1 0 0	$\lambda, \lambda-2 \dots -\lambda$

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

56-4-39/54

An Asymptotic Selection Rule for the β-Disintegration of Deformed Nuclei

possibilities	matrix elements	$K=\Delta\Omega=\Delta I$	$\Delta\Lambda$	$\Delta\Sigma$	Δn_z	ΔN
T, A	$\int y_\lambda K[\sigma r]$	$\pm\lambda$	$\begin{cases}\pm(\lambda-1)\\ \pm\lambda\end{cases}$	$\begin{cases}\pm 1\\ 0\end{cases}$	$\begin{cases}\pm 1\\ 0\end{cases}$	$\lambda, \lambda-2, \dots, -\lambda$
T	$\int y_\lambda K[\sigma \nabla]$	$\pm\lambda$	$\begin{cases}\pm(\lambda-1)\\ \pm\lambda\end{cases}$	$\begin{cases}\pm 1\\ 0\end{cases}$	$\begin{cases}\pm 1\\ 0\end{cases}$	$\lambda, \lambda-2, \dots, -\lambda$

There are 1 table and 1 Slavic reference.

ASSOCIATION: Leningrad Pedagogical Institute imeni A.I. Gertsen (Leningradskiy pedagogicheskiy institut imeni A.I. Gertsena)

SUBMITTED: July 2, 1957

AVAILABLE: Library of Congress

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, M. Ye.

Probabilities of radiative transitions in odd and odd-odd deformed nuclei. Izv. AN SSSR. Ser. fiz. 27 no.1:118-124 Ja '63. (MIRA 16:1)

(Quantum theory) (Nuclei, Atomic)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

DZHELEPOV, B.S.; VOYKHANSKIY, M.Ye.; MEDVEDEV, A.I.; UCHEVATKIN, I.F.

On the nature of the 531.8 Kev. level of Er^{167}.
Dokl. AN SSSR 146 no.4:789-792 O '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im. D.I. Mendeleyeva. 2. Chlen-korrespondent AN SSSR (for Dzhelepov).

(Erbium)
(Quantum theory)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

S/048/61/025/002/013/016
B117/B212

AUTHOR: Voykhanskiy, M. Ye.

TITLE: Electromagnetic transitions of multipolarity $L = |J_i - J_f| + 1$

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 2, 1961, 283-286

TEXT: The present paper was read at the 11th Annual Conference on Nuclear Spectroscopy (Riga, January 25 to February 2, 1961). Within the scope of the model investigated, it is by means of the statistical factor $S(J_i L J_f)$ possible to find a relation between $T^{(\gamma)}_{1/2}(EL)$ and $T^{(\gamma)}_{1/2}(ML)$ with the level spins J_i, J_f participating in the transition. For single body states and for transitions of the type EL the following holds: (4) $S(J_i L J_f) = Z^2(l_i J_i l_f J_f;\ L/2)/(2J_i + 1)$. For magnetic multipole transitions, it holds: (5) $S(J_i L J_f) = Z^2(l_i + 1 J_i l_f J_f;\ L/2)/(2J_i + 1)$ if $J_i = l_i + 1/2$ and (6) $S(J_i L J_f) = Z^2(l_i - 1 J_i l_f J_f;\ L/2)/(2J_i + 1)$ if $J_i = l_i - 1/2$.

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The function Z(abcd; 1/2 L) in formulas (4), (5), and (6) represents a combination of the Racah coefficient W (abcd; 1/2 L) and the Clebsch-Gordan coefficient (Ref. 3). In the values of the level spin J_i, J_f and the multipolarity L are given then the formulas (4)-(6) yield the same result. The statistical numerical values of $S(J_iLJ_f)$ for γ-transitions with $L = |J_i - J_f|$ are given in Table 1 and those for $S(J_iLJ_f)$ for the γ-transitions of the type EL and ML for the multipolarity $L = |J_i - J_f| + 1$ are given in Table 2. The mixtures of the type M1 + E2 and E1 + M2 have a special meaning. Considering $S(J_iLJ_f)$ for these transitions leads to various effects, according to the value of the spins J_i, J_f of initial and final states. 1) At $J_i = 1/2$ or $J_f = 1/2$, but $J_i \neq J_f$, the dipole and quadrupole radiation is characterized by the same value of $S(J_iLJ_f)$. 2) At J_i, $J_f \neq 1/2$ and $J_i \neq J_f$ taking into account the statistic factor leads to a greater probability (1.2 to 1.7 times greater) of a dipole radiation and a considerably smaller probability (up to 1/20 and higher) of a quadrupole radiation. For transitions with equal

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values of the spin $J_i = J_f$ the consideration of $S(J_iLJ_f)$ shows an opposite effect: The probability of a dipole radiation decreases substantially (down to 1/50 and more), the probability of a quadrupole radiation remains practically unchanged. Table 3 gives numerical values of the statistical factor for the transitions $J_i = J_f$. A magnetic multipole radiation $L = |J_i - J_f|$ is possible for transitions between the following states: Either $J_i = l_i + 1/2 \longrightarrow J_f = l_f - 1/2$, or $J_i = l_i - 1/2 \longrightarrow J_f = l_f + 1/2$. Table 4 shows formulas for the dimensionless factor $M\mu$ for four possible types of transitions. $J_>$ denotes the largest and $J_<$ the smallest values of J_i and J_f. It is shown that for magnetic multipole transitions with $L = |J_i - J_f| + 1$ there is a dependence of the transition probability (according to Moshkovskiy) on the level spin J_i and J_f not only in the statistical factor but also in $M\mu$. According to Weisskopf it exists only in the statistical factor. The electric and magnetic multipole transitions $L_1 = |J_i - J_f|$ and $L_2 = |J_i - J_f| + 1$ are characterized by the statistical factor $S(J_iLJ_f)$ which differs consider-

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ably with the exception of $J_i = 1/2$ or $J_f = 1/2$. The author thanks L. A. Sliv for the interest. There are 4 tables and 4 references: 2 Soviet-bloc.

ASSOCIATION: Leningradskiy khimiko-farmatsevticheskiy institut (Leningrad Chemicopharmaceutical Institute)

Таблица 1

Статистический множитель $S(J_i L J_f)$ для переходов типа EL и ML с $L = |J_i - J_f|$

J_f	J_i						
	1/2	3/2	5/2	7/2	9/2	11/2	13/2
1/2	—	1	1	1	1	1	1
3/2	2	—	6/5	9/7	4/3	15/11	18/13
5/2	3	9/5	—	9/7	10/7	50/33	225/143
7/2	4	18/7	12/7	—	4/3	50/33	400/429
9/2	5	10/3	50/21	5/3	—	15/11	225/143
11/2	6	45/11	100/33	25/11	18/11	—	18/13
13/2	7	63/13	525/143	1225/429	315/143	21/13	—

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Electromagnetic transitions ...

S/048/61/025/002/013/016
B117/B212

Таблица 2

Статистический множитель $S(J_i L J_f)$ для переходов типа EL и ML с $L = |J_i - J_f| + 1$

J_f	J_i = 1/2	3/2	5/2	7/2	9/2	11/2	13/2
1/2	1	1	1	1	1	1	1
3/2	2	1/2	2/7	1/3	4/11	5/13	2/5
5/2	3	3/7	9/35	1/7	3/11	30/143	3/13
7/2	4	3/8	4/21	1/21	20/231	50/429	20/143
9/2	5	10/11	10/33	25/231	1/33	13/429	23/429
11/2	6	15/13	60/143	75/429	19/143	5/143	6/143
13/2	7	7/8	7/13	35/143	49/429	7/143	1/65

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Electromagnetic transitions ...

Таблица 3

Статистический множитель $S(JLJ)$ для переходов между состояниями $J_i = J_f = J$

L	J = $^1/_2$	$^3/_2$	$^5/_2$	$^7/_2$	$^9/_2$	$^{11}/_2$	$^{13}/_2$
1	1	$^1/_5$	$^3/_{35}$	$^1/_{21}$	$^1/_{33}$	$^3/_{143}$	$^1/_{65}$
2	—	1	$^8/_7$	$^{25}/_{21}$	$^{40}/_{33}$	$^{175}/_{143}$	$^{14}/_{13}$

Таблица 4

Выражения для M_μ для четырех возможных видов переходов магнитного типа

J_i	J_f	M_μ
$l_i + {^1/_2}$	$l_f - {^1/_2}$	$\left[\mu_p L - \frac{L}{L+1}\right]^2$
$l_i - {^1/_2}$	$l_f + {^1/_2}$	$\left[\mu_p L - \frac{L}{L+1}\right]^2$
$l_i + {^1/_2}$	$l_f + {^1/_2}$	$(J_> + 1)^2 \left[\mu_p + \frac{2J_< - 1}{L+1}\right]^2$
$l_i - {^1/_2}$	$l_f - {^1/_2}$	$J_<^2 \left[\mu_p - \frac{2J_> + 3}{L+1}\right]^2$

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, M.Ye.

Dependence of the probability of gamma-radiation of nuclei on the moments of state involved in transitions. Izv.vys.ucheb. zav.; fiz. no.3:103-108 '61. (MIRA 14:8)

1. Leningradskiy khimiko-farmatsevticheskiy institut.
(Gamma rays) (Nuclear reactions)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, M.YE.

BR

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Akademiya nauk SSSR. Fiziko-tekhnicheskiy institut im. A. F. Ioffe

Gamma-luchi (Gamma Rays) Moscow, Izd-vo AN SSSR, 1961. 720 p.
Errata slip inserted. 3300 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Fiziko-tekhnicheskiy institut im. A. F. Ioffe.

Resp. Ed.: L. A. Sliv, Doctor of Physics and Mathematics; Ed. of Publishing House: N. K. Zaychik; Tech. Ed.: A. V. Smirnova.

PURPOSE: This book is intended for theoretical and experimental physicists working in the field of nuclear spectroscopy and in related fields where gamma rays are utilized. It may also be useful to advanced students of physics.

COVERAGE: The book, representing a symposium of papers whose authors are specialists in their areas, attempts to provide the fullest possible coverage of theoretical and experimental methods of

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Gamma Rays SOV/5914

determining nuclear gamma-radiation characteristics and the use of gamma rays to study matter, particularly nuclear structure. The book contains a large number of tables, graphs, and nomographs and can be used as an encyclopedical manual on gamma rays. No personalities are mentioned. References accompany each part.

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Ch. 3. Formulas and Nomograms For Determining $T_{1/2}^{(\gamma)}$ 20

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S/058/62/000/008/015/134
A061/A101

AUTHOR: Voykhanskiy, M. Ye.

TITLE: Nuclear radiative transitions in the shell model

PERIODICAL: Referativnyy zhurnal, Fizika, no. 8, 1962, 34, abstract 8B242 (In collection: "Gamma-luchi", Moscow - Leningrad, AN SSSR, 1961, 5 - 43)

TEXT: The present review (intended primarily for experimenters) contains detailed calculations of the single-particle electromagnetic transition probabilities with tables and nomograms, and a synopsis of selection rules for single-particle and many-particle transitions.

V. Neudachin

[Abstracter's note: Complete translation]

Card 1/1

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

S/058/62/000/008/016/134
A061/A101

AUTHOR: Voykhanskiy, M. Ye.

TITLE: Radiative transitions in the generalized nucleus model

PERIODICAL: Referativnyy zhurnal, Fizika, no. 8, 1962, 34 - 35, abstract 8B243 (In collection: Gamma-luchi, Moscow - Leningrad, AN SSSR, 1961, 44 - 84)

TEXT: The present review (intended primarily for experimenters) contains detailed formulas for the collective and single-particle transition probabilities in deformed nuclei, and tables of eigenfunctions and energy eigenvalues for the problem of proton motion in a single-particle deformed potential field for shell N=5 (i.e., for nuclei with $Z > 82$). A synopsis of selection rules for asymptotic quantum numbers is given, and tables are compiled for the Clebsch-Gordan coefficients.

V. Neudachin

[Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

S/048/61/025/002/015/016
B117/B212

AUTHORS: Voykhanskiy, M. Ye. and Peker, L. K.

TITLE: Selection rules for beta and gamma transitions on odd-odd nuclei

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 2, 1961, 297-308

TEXT: The present paper was read at the 11th Annual Conference on Nuclear Spectroscopy (Riga, January 25 to February 2, 1961). It deals with the asymptotic selection rules and their significance for beta and gamma transitions. The authors have shown that transitions in such nuclei exhibit a number of peculiarities, as compared to transitions in nuclei with an odd A. The beta and gamma transitions in odd-odd nuclei may be divided into two groups (Ref. 9). Transitions between states of the same binding scheme $\Omega_i = \Omega_{1i} \pm \Omega_{2i} \rightarrow \Omega_f = \Omega_{1f} \pm \Omega_{2f}$ are called transitions of the first class. Transitions between states of a different binding scheme

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B117/B212

Selection rules for ...

$\Omega_i = \Omega_{1i} \pm \Omega_{2i} \rightarrow \Omega_f = \Omega_{1f} \pm \Omega_{2f}$ are called transitions of the second class by the authors. Experimental data on the beta-transition probability (log ft) in odd-odd nuclei are given in Table 2 for deformed nuclei, and in Table 3 for spherical nuclei. These data are divided into groups according to the transition classes and the order of forbiddenness. They show that beta transitions of the second class are, as a rule, marked by larger log ft values. In both classes those transitions are strictly separated which, according to Λ (j or l), are allowed or forbidden. At present, an analysis of gamma transitions in even-even nuclei is practically an analysis of isomeric transitions of $L \geqslant 2$. Table 4 gives experimental data for isomeric transitions of the second class in deformed nuclei. In $_{11}Na^{22}_{11}$, $_{11}Na^{24}_{13}$, $_{65}Tb^{158}_{93}$, $_{71}Lu^{174}_{103}$, and $_{95}Am^{242}_{147}$, these transitions connect both interlinks of a doublet. With the exception of gamma transitions in $_{11}Na^{22}_{11}$ and $_{11}Na^{24}_{13}$, where there is no forbiddenness, all the other transitions are greatly delayed. This delay may be influenced by the Λ forbiddenness should be found for gamma transitions of the second class, with re-

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B117/B212

Selection rules for ...

spect to j or l. It is illustrated by data on transition probabilities of the M4-type. In this case, transitions are only forbidden if the binding scheme changes. The established data point to a strong influence of the Λ (j of l) selection rules for beta and gamma transitions in nuclei with even A. It is therefore possible to apply for the transition characteristic of odd-odd and even-even, deformed and spherical nuclei not only I, K, Ω (I, j) but also the quantum numbers Λ (j or l). This conclusion agrees with information in Ref. 8 where it was shown that the introduction of asymptotic quantum numbers Λ, Σ is of significance for the classification of the moments of state of odd-odd nuclei. The authors thank M. A. Listengarten for discussing the paper. There are 5 tables and 21 references: 8 Soviet-bloc.

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gos. universiteta im. A. A. Zhdanova (Scientific Research Institute of Physics, Leningrad State University imeni A. A. Zhdanov)
Leningradskiy khimiko-farmatsevticheskiy institut (Leningrad Chemicopharmaceutical Institute)

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Selection rules for ...

Legend to the Tables: 1) parent and daughter nuclei; 2) energy of the daughter-nucleus level; 3) allowed transitions of first class; 4) allowed transitions of second class; 5) once forbidden first-class transitions; 6) once forbidden second-class transitions

Таблица 2*

β-Переходы в деформированных ядрах с четным A

1 Исходное и дочернее ядро	$I_i K_i \pi_i$	$I_f K_f \pi_f$	Энергия уровня дочернего ядра 2 E, keV	lg ft
1	2	3	4	5
3 Разрешенные переходы I класса $\Omega_1 - \Omega_2 \to \Omega_1 - \Omega_1$				
${}_{67}Ho^{164}_{97} \to {}_{68}Er^{164}_{96}$	1 1 +	0 0 +	0	6,4
	1 1 +	2 0 +	91	6,7
${}_{66}Dy^{166}_{100} \to {}_{67}Ho^{166}_{99}$	0 0 +	1 0 +	428	4,8
${}_{73}Ta^{178}_{105} \to {}_{72}Hf^{178}_{106}$	1 1 +	0 0 +	0	4,7
	1 1 +	2 0 +	93	4,8
	1 1 +	2 2 +	1480	4,6
${}_{93}Np^{240}_{147} \to {}_{94}Pu^{240}_{146}$	1 1 (∓)	1 0 −	597	6,3

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4. Разрешенные переходы II класса $\Omega_1 + \Omega_2 \rightarrow \Omega_1 - \Omega_1$

${}_{63}Eu^{152}_{89} \rightarrow {}_{62}Sm^{152}_{90}$	3	3	—	2	2	—	1531	~10
${}_{63}Eu^{154}_{91} \rightarrow {}_{64}Gd^{154}_{90}$	3	3	—	2	2	—	1400	~10
${}_{65}Tb^{160}_{95} \rightarrow {}_{66}Dy^{160}_{94}$	3	3	—	2	2	—	1265	8,1

5 Однократно-запрещенные переходы I класса

${}_{66}Dy^{166}_{100} \rightarrow {}_{67}Ho^{166}_{99}$	0	0	+	0	0	—	0	7,4
	0	0	+	1	0	—	84	6,0
${}_{67}Ho^{166}_{99} \rightarrow {}_{68}Er^{166}_{98}$	0	0	—	0	0	+	0	8,1
	0	0	—	0	0	+	1460	7,5
	0	0	—	1	0	(+)	1663	6,8
${}_{73}Ta^{180}_{107} \rightarrow {}_{74}W^{180}_{106}$	1	0	—	0	0	+	0	6,8
	1	0	—	2	0	+	102	6,5
${}_{93}Np^{236}_{143} \rightarrow {}_{94}Pu^{236}_{142}$	1	1	—	0	0	+	0	6,8
	1	1	—	2	0	+	44,6	7,1
${}_{93}Np^{236}_{143} \rightarrow {}_{92}U^{236}_{144}$	1	1	—	0	0	+	0	7,2
	1	1	—	2	0	+	45	7,7
${}_{93}Np^{238}_{145} \rightarrow {}_{94}Pu^{238}_{144}$	2	2	(±)	2	2	+	1030	6,2
	2	2	(±)	3	2	+	1071	6,6
${}_{92}U^{240}_{148} \rightarrow {}_{93}Np^{240}_{147}$	0	0	+	1	1	(±)	0	5,7

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${}_{93}Np^{240}_{147} \to {}_{94}Pu^{240}_{146}$	1	1	(±)	0	0	+	0	6,7
	1	1	(±)	2	0	+	43	7,2
	1	1	(±)	0	0	+	858	6,9
	1	1	(±)	2	0	+	900	7,1
	1	1	(±)	2	(2+)		942	6,8
${}_{95}Am^{243}_{147} \to {}_{96}Cm^{242}_{146}$	1	0	—	0	0	+	0	7,1
	1	0	—	2	0	+	42	6,8
${}_{95}Am^{242}_{147} \to {}_{94}Pu^{242}_{148}$	1	0	—	0	0	+	0	~7,6
	1	0	—	2	0	+	44,5	7,3
${}_{95}Am^{244}_{149} \to {}_{96}Cm^{244}_{148}$	1	1	(—)	0	0	+	0	~6,3

6 Однократно-запрещенные переходы II класса

${}_{63}Eu^{152}_{89} \to {}_{62}Sm^{152}_{90}$	3	3	—	2	2	+	1087	9,5
	3	3	—	3	2	+	1235	9,7
${}_{63}Eu^{154}_{91} \to {}_{64}Gd^{154}_{90}$	3	3	—	2	2	+	990	11,6
	3	3	—	3	2	+	1128	11,0

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Selection rules for ...

TABLE 3

1 Исходное и конечное ядро	$I_i \pi_i$	$I_f \pi_f$	2 Энергия уровня дочернего ядра E, keV	lg ft
1	2	3	4	5
3. Разрешенные переходы I класса $j_1 - j_2 + a \to j_1 - j_2$				
${}_5B^{12}_7 \to {}_6C^{12}_6$	1 +	0 +	0	4,2
	1 +	2 +	4400	5,1
	1 +	0 +	7060	4,2
${}_{10}Ne^{24}_{14} \to {}_{11}Na^{24}_{13}$	0 +	1 +	472	4,4
${}_{13}Al^{26}_{13} \to {}_{12}Mg^{26}_{14}$	0 +	0 +	0	3,5
${}_{15}P^{32}_{17} \to {}_{16}S^{32}_{16}$	1 +	0 +	0	7,9
${}_{14}Si^{32}_{18} \to {}_{15}P^{32}_{17}$	0 +	1 +	0	6,7
${}_{15}P^{34}_{19} \to {}_{16}S^{34}_{18}$	1 +	0 +	0	5,1
	1 +	2 +	2127	4,7
${}_{17}Cl^{34}_{17} \to {}_{16}S^{34}_{18}$	0 +	0 +	0	3,5
${}_{19}K^{38}_{19} \to {}_{18}Ar^{38}_{20}$	0 +	0 +	0	3,4
${}_{21}Sc^{42}_{21} \to {}_{20}Ca^{42}_{22}$	0 +	0 +	0	3,0
${}_{21}Sc^{44}_{23} \to {}_{20}Ca^{44}_{24}$	3 +	2 +	1130	5,3
${}_{23}V^{46}_{23} \to {}_{22}Ti^{46}_{24}$	0 +	0 +	0	3,5

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S/048/61/025/002/015/016
B117/B212

Selection rules for ...

${}_{25}\mathrm{Mn}^{50}_{25} \to {}_{24}\mathrm{Cr}^{50}_{26}$	0 +	0 +	0	3,5
${}_{23}\mathrm{V}^{52}_{29} \to {}_{24}\mathrm{Cr}^{52}_{28}$	2 +	2 +	1460	5,5
${}_{25}\mathrm{Mn}^{52}_{27} \to {}_{24}\mathrm{Cr}^{52}_{28}$	2 +	2 +	1460	5,3
${}_{27}\mathrm{Co}^{54}_{27} \to {}_{26}\mathrm{Fe}^{54}_{28}$	0 +	0 +	0	3,5
${}_{27}\mathrm{Co}^{58}_{31} \to {}_{26}\mathrm{Fe}^{58}_{32}$	2 +	2 +	814	6,6
	2 +	2 +	1820	7,5
${}_{27}\mathrm{Co}^{60}_{33} \to {}_{28}\mathrm{Ni}^{60}_{32}$	2 +	2 +	1330	7,2
${}_{29}\mathrm{Cu}^{64}_{35} \to {}_{28}\mathrm{Ni}^{64}_{36}$	1 +	0 +	0	5,0
	1 +	2 +	1340	5,6
${}_{29}\mathrm{Cu}^{64}_{35} \to {}_{30}\mathrm{Zn}^{64}_{34}$	1 +	0 +	0	5,2
${}_{28}\mathrm{Ni}^{66}_{38} \to {}_{29}\mathrm{Cu}^{66}_{37}$	0 +	1 +	0	3,9
${}_{29}\mathrm{Cu}^{66}_{37} \to {}_{30}\mathrm{Zn}^{66}_{36}$	1 +	0 +	0	5,4
	1 +	2 +	1050	5,6
${}_{31}\mathrm{Ga}^{66}_{35} \to {}_{30}\mathrm{Zn}^{66}_{36}$	0 +	0 +	0	7,8
${}_{31}\mathrm{Ga}^{68}_{37} \to {}_{30}\mathrm{Zn}^{68}_{38}$	1 +	0 +	0	5,2
	1 +	2 +	1020	5,3
${}_{31}\mathrm{Ga}^{70}_{39} \to {}_{32}\mathrm{Ge}^{70}_{38}$	1 +	0 +	0	5,1
	1 +	2 +	1038	5,6
	1 +	0 +	1210	5,9
${}_{35}\mathrm{Br}^{78}_{43} \to {}_{34}\mathrm{Se}^{78}_{44}$	1 +	0 +	0	4,4
${}_{35}\mathrm{Br}^{80}_{45} \to {}_{34}\mathrm{Se}^{80}_{46}$	1 +	0 +	0	4,6

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S/048/61/025/002/015/016
B117/B212

Selection rules for ...

$_{35}Br^{80}_{45} \rightarrow {}_{36}Kr^{80}_{44}$	1 +	0 +	0	5,5
	1 +	2 +	620	5,0
$_{37}Rb^{82}_{45} \rightarrow {}_{36}Kr^{82}_{46}$	1 +	0 +	0	4,3
$_{43}Tc^{94}_{51} \rightarrow {}_{42}Mo^{94}_{52}$	2 +(3+)	2 +	870	5,4
$_{45}Rh^{98}_{53} \rightarrow {}_{44}Ru^{98}_{54}$	2 +	2 +	660	4,9

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S/048/61/025/002/015/016
B117/B212

Selection rules for ...

Таблица 3 (продолжение)

1 Исходное и конечное ядро	$I_i \pi_i$	$I_f \pi_f$	2 Энергия уровня дочернего ядра E, keV	lg ft
1	2	3	4	5
${}_{45}Rh^{104}_{59} \rightarrow {}_{46}Pd^{104}_{58}$	1 +	0 +	0	4,5
	1 +	2 +	556	5,8
${}_{45}Rh^{106}_{61} \rightarrow {}_{46}Pd^{106}_{60}$	1 +	0 +	0	5,2
	1 +	2 +	513	6,4
${}_{47}Ag^{106}_{59} \rightarrow {}_{46}Pd^{106}_{60}$	1 +	0 +	0	4,9
	1 +	2 +	513	5,2
${}_{47}Ag^{108}_{61} \rightarrow {}_{46}Pd^{108}_{62}$	1 +	0 +	0	4,8
	1 +	2 +	430	6,0
	1 +	2 +	1030	4,8
${}_{47}Ag^{108}_{61} \rightarrow {}_{48}Cd^{108}_{60}$	1 +	0 +	0	4,0
	1 +	2 +	637	6,0
${}_{49}In^{108}_{59} \rightarrow {}_{48}Cd^{108}_{60}$	2 +	2 +	637	6,0
${}_{47}Ag^{110}_{63} \rightarrow {}_{48}Cd^{110}_{62}$	1 +	0 +	0	5,1
	1 +	2 +	656	4,5
${}_{49}In^{114}_{65} \rightarrow {}_{48}Cd^{114}_{66}$	1 +	0 +	0	4,6
${}_{49}In^{114}_{65} \rightarrow {}_{50}Sn^{114}_{64}$	1 +	0 +	0	4,6
	1 +	2 +	1300	5,7

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

S/148/61/025/002/015/016
B117/B212

Selection rules for ...

$_{49}In^{116}_{67} \to {}_{50}Sn^{116}_{66}$	1 +	0 +	0	5,0
$_{51}Sb^{120}_{69} \to {}_{50}Sn^{120}_{70}$	1 +	0 +	0	4,5
	1 +	2 +	1180	5,5
$_{53}J^{128}_{75} \to {}_{52}Te^{128}_{76}$	1 +	0 +	0	5,2
	1 +	2 +	750	5,7
$_{53}J^{128}_{75} \to {}_{54}Xe^{128}_{74}$	1 +	0 +	0	6,1
	1 +	2 +	460	6,3
	1 +	2 +	990	6,6
$_{55}Cs^{128}_{73} \to {}_{54}Xe^{128}_{74}$	1 +	0 +	0	4,8
$_{55}Cs^{130}_{75} \to {}_{54}Xe^{130}_{76}$	1 +	0 +	0	5,1
$_{55}Cs^{130}_{75} \to {}_{56}Ba^{130}_{74}$	1 +	0 +	0	4,9
$_{59}Pr^{140}_{81} \to {}_{58}Ce^{140}_{82}$	1 +	0 +	0	4,3
4 Разрешенные переходы II класса $j_1 + j_2 - a \to j_1 - j_2$				
$_{6}C^{14}_{8} \to {}_{7}N^{14}_{7}$	0 +	1 +	0	9,0
$_{8}O^{14}_{6} \to {}_{7}N^{14}_{7}$	0 +	1 +	0	7,6
$_{10}Ne^{18}_{8} \to {}_{9}F^{18}_{9}$	0 +	1 +	0	2,9
$_{9}F^{18}_{9} \to {}_{8}O^{18}_{10}$	1 +	0 +	0	3,6

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Selection rules for ...

${}_{11}Na^{22}_{11} \rightarrow {}_{10}Ne^{22}_{12}$	3 +	2 +	1280	7,3
${}_{11}Na^{24}_{13} \rightarrow {}_{12}Mg^{24}_{12}$	4 +	3 +	5230	6,8
${}_{13}Al^{28}_{15} \rightarrow {}_{14}Si^{28}_{14}$	3 +	2 +	1790	4,9
${}_{15}P^{28}_{13} \rightarrow {}_{14}Si^{28}_{14}$	(3 +)	2 +	1790	4,9
${}_{15}P^{30}_{15} \rightarrow {}_{14}S^{30}_{16}$	$\left\{ \begin{matrix} 1 + \\ 1 + \end{matrix} \right.$	0 + 2 +	0 2240	5,0 5,4
${}_{17}Cl^{34}_{17} \rightarrow {}_{16}S^{34}_{18}$	3 +	2 +	2127	6,1
${}_{19}K^{38}_{19} \rightarrow {}_{18}Ar^{38}_{20}$	3 +	2 +	2150	5,0
${}_{23}V^{48}_{25} \rightarrow {}_{22}Ti^{48}_{26}$	4 +	4 +	2310	6,1
${}_{25}Mn^{54}_{29} \rightarrow {}_{24}Cr^{54}_{30}$	3 +	2 +	835	6,1

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B117/B212

Selection rules for ...

Таблица 3 (окончание)

Исходное и конечное ядро	$I_i \pi_i$	$I_f \pi_f$	Энергия уровня дочернего ядра E, keV	lg ft
1	2	3	4	5
$_{81}Tl^{200}_{119} \rightarrow {}_{80}Hg^{200}_{120}$	2 −	2 +	368	7,8
$_{81}Tl^{206}_{125} \rightarrow {}_{82}Pb^{206}_{124}$	0 −	0 +	0	5,2
$_{82}Pb^{212}_{130} \rightarrow {}_{83}Bi^{212}_{129}$	0 +	1 −	0	6,6
$_{82}Pb^{214}_{132} \rightarrow {}_{83}Bi^{214}_{131}$	0 +	1 −	0	6,5
$_{83}Bi^{214}_{131} \rightarrow {}_{84}Po^{214}_{130}$	1 −	0 +	0	7,0

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Selection rules for ...

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B117/B212

Таблица 4

Изомерные переходы II класса в деформированных нечетно-нечетных ядрах

Ядро	$T_{1/2}$	E_{γ}, keV	Тип перехода	$\nu = \Delta K - L$	$F = \frac{T_{эксп}}{T_{теор}}$
$_{11}Na^{22}_{11}$	$0{,}226 \cdot 10^{-6}$ сек	593	$E2$	1	$\sim 10^{3}$
$_{11}Na^{24}_{13}$	0,02 сек	472	$M3$	0	~ 1
$_{63}Eu^{152}_{89}$	$>9{,}2$ час	50	$M3$	0	$>5 \cdot 10^{6}$
$_{65}Tb^{156}_{91}$	5,0 час	88,4	$E3$	0	$\sim 10^{4}$
$_{65}Tb^{158}_{93}$	11 сек	111	$M3$	0	$\sim 10^{2}$
$_{67}Ho^{160}_{93}$	>5 час	60	$E3$	0	$>10^{3}$
$_{71}Lu^{174}_{103}$	165 дн	59	$M3$	2	10^{6}
$_{95}Am^{242}_{147}$	152 год	48,6	$E4$	1	$\sim 10^{6}$

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, M. YE.

VOYKHANSKIY, M.Ye.

Selection rules for electromagnetic transitions in deformed nuclei. Zhur. eksp. i teor. fiz. 33 no.4:1004-1009 O '57. (MIRA 11:1)

1. Leningradskiy pedagogicheskiy Institut im. Gertsena.
(Nuclei, Atomic)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

Voy Khanskiy, M. Ye.

VOYKHANSKIY, M.Ye.

Asymptotic selection rules for the beta decay of deformed nuclei. Zhur. eksp. i teor. fiz. 33 no.4:1054-1056 O '57. (MIRA 11:1)

1. Leningradskiy pedagogicheskiy institut im. A.I. Gertsena.
(Nuclei, Atomic--Decay)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

Voykhanskiy

VOYKHANSKIY, M. Ye. Cand Phys-Math Sci -- (diss) "On principles for the selection of Beta and Gamma transitions in ~~strained~~ deformed nuclei." Len, 1958. 10 pp. (Min of Higher Education. Len State Ped Inst im A. I. Gertsen. Chair of Theoretical Physics.) 100 copies.
(KL, 8-58, 103)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

44950

S/048/63/027/001/039/043
B108/B180

24.6410

AUTHOR: Voykhanskiy, M. Ye.

TITLE: The probabilities of radiation transitions in odd and odd-odd deformed nuclei

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 27, no. 1, 1963, 118-124

TEXT: The formulas derived by S. Nilsson for the probability of radiative transitions involve very cumbersome computations. The internal wave functions of the deformed nucleus were represented as an expansion with respect to the eigenfunctions of the isotropic harmonic oscillator. The present paper is based on a representation through the asymptotic quantum numbers n_z, n_ϱ, Λ, Σ which are associated with the anisotropic harmonic oscillator. It results in the expansion $\chi_{N\Omega} = \sum_{n_z\Sigma} A_{n_z\Sigma} \psi_{n_z n_\varrho \Lambda\Sigma}$ (cf. also A. Rassey. Phys. Rev., 109, 949 (1958)). The radiative transitions are

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

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B108/B180

The probabilities of radiation ...

considered with the aid of these wave functions. In this representation the selection rules can be introduced more easily than in Nilsson's calculations and the resulting expressions are simpler. Results: the transition probability for odd nuclei is

$$w_\gamma(EL) = \frac{\ln 2}{T^{(\gamma)}_{1/2}} = \frac{2(L+1)}{L(2L+1)} \frac{e^2}{\hbar c} \varepsilon_L^2 \frac{1-(|k|-\frac{3}{2}L)^2}{(L+k)!(L-k)!} \times \frac{E_\gamma^{2L+1}}{\hbar(\hbar\omega_0)^L (mc^2)^L} [C^{I_f K_f}_{I_i K_i; Lk}]^2 G^2_{EL}, \quad (25)$$

(transition with multipolarity EL from the state $I_i; \Omega_i = K_i, \pi_i, N_i, n_{zi}, \Lambda_i, \Sigma_i$ into the state I_f, Ω_f). ε_L is a factor accounting for the recoil effect.

$$G_{EL} = \sum_{n_{zi}, n_{zf}} \delta_{n_{zf}, n_{zi}+L-|k|-2m} \sum_{\Lambda_i, \Lambda_f} \delta_{\Lambda_f, \Lambda_i+k} \sum_{\Sigma_f, \Sigma_i} \delta_{\Sigma_i, \Sigma_f} \times A_{n_{zf}\Sigma_f} A_{n_{zi}\Sigma_f} \left[\langle n_{zf}| z^{L-|k|} |n_{zi}\rangle - \frac{3-2s}{9} \delta_{k,0}\delta_{L,2}\right] \times \langle n_{\rho f}\Lambda_f | \rho^{|k|} | n_{\rho i}\Lambda_i\rangle \quad (22)$$

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B108/B180

The probabilities of radiation ...

For an odd-odd nucleus, the reduced transition probability differs from that of an odd nucleus only by a factor of $\int \chi^{*}_{\Omega_{1f}} \chi_{\Omega_{1i}} d\tau_1$, which contains the wave functions of the nucleon not involved in the transition. The factor G_{EL} for odd-odd nuclei has the form

$$G_{EL} = \sum_{n_{zf}, n_{zi}} \delta_{n_{zf}, n_{zi}+L-|k|-2m} \sum_{\Lambda_i, \Lambda_f} \delta_{\Lambda_i+\Lambda_f, |k|} \sum_{\Sigma_i, \Sigma_f} \delta_{-\Sigma_f, \Sigma_i} \times \tag{29}$$
$$\times A_{n_{zf}\Sigma_f} A_{n_{zi}\Sigma_i} \left[\langle n_{zf} | z^{L-|k|} | n_{zi} \rangle - \frac{3-2s}{9} \delta_{k,0} \delta_{L,2} \right] \times$$
$$\times \langle n_{\rho f} \Lambda_f | \rho^{|k|} | n_{\rho i} \Lambda_i \rangle.$$

The corresponding formulas for magnetic transitions will be published in a later paper. This paper was read at the 12. Annual Conference on Nuclear Spectroscopy, Leningrad, January 26 - February 2, 1962. There is 1 table.

Card 3/3

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, M. YE.

FA 50/49T67

USSR/Nuclear Physics - Beta-Decay Jun 49
Nuclear Physics - Hydrogen Isotope

"The Problem of Beta-Disintegration of H^3," M. Ye. Voykhanskiy, B. S. Dzhelepov, L. A. Sliv, Leningrad State U imeni A. A. Zhdanov, 3 pp

"Dok Ak Nauk SSSR" Vol LXVI, No 5

All "mirror" nuclei, type $M_Z^{2Z\pm1}$, form a compact group of permissible beta-emitters; their theory concerns properties of type M_Z^{2Z-1} beta-emitters, upper limits of which change from 13 keV to 5,000 keV and the period from one second to 4.10^3 seconds. Submitted by Acad P. I. Lukirskiy, 13 Apr 49.

[redacted] 50/49T67

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, M. Ye.

Electromagnetic transitions of multipolarity $L = |J_i - J_f| + 1$
Izv. AN SSSR. Ser. fiz. 25 no.2:283-286 F '61. (MIRA 14:3)

1. Leningradskiy khimiko-farmatsevticheskiy institut.
(Nuclei, Atomic)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, M. Ya.; PEKER, L.K.

Selection rules for β and α transitions in odd-odd nuclei.
Izv. AN SSSR. Ser. fiz. 25 no.2:297-308 F '61. (MIRA 14:3)

1. Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gosudarstvennogo universiteta im. A. A. Zhdanova i Leningradskiy khimiko-farmatsevticheskiy institut.
(Nuclei, Atomic)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

L 06496-67 EWT(m)
ACC NR: AP7000460 SOURCE CODE: UR/0367/66/004/001/0066/0071

VOYKHANSKIY, M. Ye.; LISTENGARTEN, M. A.; FERESIN, A. P.

26
B

"Problem of Penetration Effects in Internal Conversion" 19

Moscow, Yadernaya Fizika; July, 1966; pp 66-71

ABSTRACT: Anomalies in internal conversion coefficients are connected with the difference in the selection rules for γ'-transitions and conversion transitions, due to the penetration of an electron into the nucleus. In cases when the first terms in the expansion of the penetration conversion matrix elements are negligible, higher terms play a significant role, and selection rules with respect to asymptotic quantum numbers are obtained for them. Orig. art. has: 7 formulas and 1 table. [Based on authors' Eng. abst.] [JPRS: 37,330]

ORG: Leningrad State University (Leningradskiy gosudarstvennyy universitet)

TOPIC TAGS: gamma transition, nuclear physics

SUB CODE: 20 / SUBM DATE: 07Jul65 / ORIG REF: 014 / OTH REF: 012

Card 1/1 *mLC*

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

L 22925-66

ACC NR: AP6007681 (A) SOURCE CODE: UR/0413/66/000/003/0059/0059

AUTHOR: Konstantinov, V. N.; Semenov, V. G.; Voykhanskiy, P. G.; Fedoseyev, V. I.

ORG: none

TITLE: Unit for longitudinal orientation of a polymer film. Class 39, No. 178483 [Announced by the Scientific Research Institute for the Construction of Chemical Machinery (Nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 59

TOPIC TAGS: film processing, photographic equipment

ABSTRACT: An Author Certificate has been issued describing a unit for the longitudinal orientation of polymer films. The machine is equipped with one set of retarding rolls and another set of pulling rolls. To reduce the transverse shrinkage of the film and control its deformation rate, an orientation roll, which can be heated up, is installed between both the pulling and retarding rolls and equipped with a mechanism for moving the film in the vertical plane. [LD]

SUB CODE: 14/ SUBM DATE: 07Jan65/

film processing

Card 1/1 UDC: 678.017.4

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, Ye.D., inzh.

Mounting four-jaw chucks on the tailstock of lathes. Mashinostroitel' no.2:33-34 F '58. (MIRA 11:3)

(Chucks)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKHANSKIY, YE. D.

AUTHOR: Voykhanskiy, Ye.D., Engineer 117-2-17/29

TITLE: Fixture for Attaching a Four-Jaw Chuck on a Tailstock (Ustanovka chetyrekhkulachkovogo patrona na zadney babke stanka)

PERIODICAL: Mashinostroitel', 1958, # 2, p 33-34 (USSR)

ABSTRACT: The described fixture - used at the plant "Ekonomayzer" - serves for attaching four-jaw chucks on lathe tailstocks. The four-jaw chucks provide a more rigid hold than the usual tailstock center and so relieve the vibration of the workpiece, which permits better utilization of the lathe capacity. This fixture also eliminates some operations, which can be seen in the example of machining a 1550 mm long, 270 mm diameter supercharger gear which formerly had to be positioned on a boring tool for milling the face surfaces, then to be removed and positioned on the indexing plate for indexing. Then the center holes had to be drilled on a radial drilling or a boring machine, and ohly after that could the gear blank be positioned on a lathe for further machining. The tailstock fixture for four-jaw chuck has made all these operations unnecessary.

There is 1 drawing.

AVAILABLE: Library of Congress

Card 1/1

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

YERMILOV, Valentin Georgiyevich; VOYKHANSKIY, Ye.A., redaktor; DIZHUR, I.M. redaktor izdatel'stva; TIKHONOVA, Ye.A., tekhnicheskiy redaktor

[Regulating steam distribution in marine steam powered machinery] Regulirovanie paroraspredeleniia sudovykh parovykh mashin. Moskva, Izd-vo "Morskoi transport," 1956. 129 p. (MLRA 10:4)

(Steam engineering) (Marine engines)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKIN, G., slesar'

Increasing the durability of plunger pairs of pump and injector units. Avt.transp. 37 no.4:49-50 Ap '59. (MIRA 12:6)

1. Avtotransportnaya kontora No.5 avtotresta Glavleningradstroya.
(Diesel engines--Fuel systems)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKIN, E. M., Cand Biol Sci (diss)-- "Forms of phosphates, the absorption and transformation of phosphorus fertilizers in the soils of the Tatar ASSR". Kazan', 1959. 17 pp (Min Higher and Inter Spec Educ RSFSR, Kazan' Order of Labor Red Banner State U im V. I. Ul'yanov-Lenin), 150 copies (KL, No 10, 1960, 128)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

Country : USSR J

Category: Soil Science. Physical and Chemical Properties of Soil.

Abs Jour: RZhBiol., No 18, 1958, No 82096

Author : Madanov, P.V.; Voykin, L.M.

Inst : Kazan Univ.

Title : Absorption of PO_4 Anion by Some Soils of the Tatar Region.

Orig Pub: Uch. zap. Kazansk un-ta, 1956, 116, No 5, 175-180

Abstract: Black earth and podzolic types of soil in the Tatar region had a high absorption capacity for water soluble phosphates (KH_2PO_4), especially carbonates of black earth and cinnamon-gray soils. Strongly podzolic soils had the smallest absorbing capacity. The

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VOYKIN, L.M.

USSR/Cultivated Plants - Grains. M-2

Abs Jour : Ref Zhur - Biol., No 20, 1958, 91621

Author : Voykin, L.M.

Inst : Kazan University

Title : Influence of Pre-Sowing Treatment of Seeds with KH_2PO_4 Solution on the Yield of Spring Wheat.

Orig Pub : Uch. zap. Kazansk, un-ta, 1957, 117, No 2, 250-253.

Abstract : The moistening of Lutescens 62 spring wheat seeds (laboratory tests) in KH_2PO_4 solution of 0.1 N concentration caused a boost in the above-ground and root mass of the crop by 14 - 16% in comparison with the control (moistening in water). In the field experiments of 1954 - 1956, the same treatment increased the yield, averaging 1.04 centner/hectare or 10.2% in three years. -- M.V. Dranishnikov.

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VOYKOV, V. I.

USSR/Chemistry Synthesis

Card : 1/1

Authors : Petrov, A. D., Ponomarenko, V. A., and Voykov, V. I.

Title : Synthesis and properties of alpha- and gamma-methylallyl silanes

Periodical : Izv. AN SSSR, Otd. Khim. Nauk., 3, 504 - 510, May - June 1954

Abstract : The synthesis of alpha- and gamma-methylallyl silanes in accordance with the Grignard-Wuertz reactions and by the utilization of crotyl halides, which calls for the study of the allyl regrouping of the halides, is described. The ability of these new type alkenyl silanes (with H-atom in the silicon) to rhodanize in the case of diluted solutions was determined by their chemical properties. The physical properties of these unsaturated hydrocarbon silicates compared with the properties of homologous olefins, are given in a table. Eight references: 5 USSR, 3 USA. Table, graphs.

Institution : Acad. of Sc. USSR, The N. D. Zelinskiy Institute of Org. Chemistry

Submitted : July 17, 1953

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VOYKIN, A.M., inzhener; TUROV, M.G., inzhener.

Examples of working out the technical designs of building machinery parts and units. Stroi. i dor. mashinostr. 1 no.4:33-34 Ap '56. (MIRA 10:1)

(Building machinery)

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VOYKIN, L.M.

MADANOV, P.V.; VOYKIN, L.M.

Modified Kappen's method for determining the sum of exchangeable bases as applicable to Chernozem soils. Uch.zap.Kaz.un. 114 no.1:69-72 '54. (MIRA 10:3)

1. Kafedra pochvovedeniya.
(Tatar A.S.S.R.--Soils--Analysis)
(Calcium) (Magnesium)

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VOYKIN, L.M.

MADANOV, P.V.; VOYKIN, L.M.

Method for determining the sum of exchangeable bases (Ca and Mg) in carbonaceous soils. Uch.zap.Kaz.un. 114 no.1:73-78 '54.
(MLRA 10:3)

1. Kafedra pochvovedeniya.
(Soils--Analysis) (Calcium) (Magnesium)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

MADANOV, P.V., prof.; VOYKIN, L.M., assistent; VOZOVIK, I.S., inzh.

Plow attachment for the placement of mineral fertilizers at the time of plowing. Zemledelie 7 no.12:80-81 D '59. (MIRA 13:3)

1. Kazanskiy gosudarstvennyy universitet imeni V.I.Ul'yanova-Lenina (for Madanov, Voykin). 2. Kazanskaya gosudarstvennaya sel'skokhozyaystvennaya opytnaya stantsiya (for Vozovik).
(Plows--Attachments) (Fertilizer spreaders)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKIN, L. M.

USSR/Soil Cultivation. Physical and Chemical Properties of Soils. J-2

Abs Jour: Ref. Zhur-Biologiya, No 1, 1958, 1214.

Author : Madanov, P.V., Voykin, L.M.
Inst :
Title : A Simplified Method for Determining the Total of Exchanged Alkali-Earth Bases in Non-Carbonate Chernozems.

Orig Pub: Pochvovedeniye, 1956, No 12, 80-82.

Abstract: The offered method is based upon an irreversible reaction, occurring between the exchanged alkali-earth bases of earth and 0.1 normal $K_2C_2O_4$ with formation of insoluble CaC_2O_4 and MgC_2O_4, which leads to a reduction in the concentration of $K_2C_2O_4$ in the solution, in a quantity equivalent to the total of the exchanged Ca and Mg of the soil. Ten grams of soil, ground and forced through a one-mm. sieve, are put in a 350 ml. retort; then 250 ml. of 0.1 normal $K_2C_2O_4$ are added, the solution is shaken up for an hour and left to sit for 24 hours with

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USSR/Soil Cultivation. Physical and Chemical Properties of Soils. J-2

Abs Jour: Ref. Zhur-Biologiya, No 1, 1958, 1214.

periodic shakings. It is filtered through a double filter, and to 50 ml. of the filtrate 20 ml. of 10% H_2SO_4 solution and 0.3 g. of activated carbon are added. This is heated (while being stirred) almost to the boiling point and filtered; the precipitate on the filter is washed in a 10% H_2SO_4 solution. The filtrate is heated to boiling point and titrated with 0.1 normal $KMnO_4$ until it is pale rose in color. The results achieved by this method with 33 specimens of leached and fertile chernozems of the Volga-Kama wooded steppe agree with those attained by the K.K. Gedroyts method.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKIN, L.M.

MADANOV, P.V.; VOYKIN, L.M.

Simplified method for determining the amount of alkali bases in some noncarbonaceous Chernozem soils. Pocvovedenie no.12:80-82 D '56. (MLRA 10:2)

1. Kazanskiy gosudarstvennyy universitet.
(Chernozem soils--Analysis)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

Voykin, L.M.

MADANOV, P.V.; VOYKIN, L.M.

Absorption of the PO_4 anion by some soils of Tatarstan. Uch. zap.Kaz.un. 116 no.5:175-180 '56. (MLRA 10:4)

1. Kafedra pochvovedeniya.
(Tatar A.S.S.R.--Soil absorption)
(Phosphates)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKOV, Ye.A.

Volkov, E. A. On a method of increasing the accuracy of the method of [illegible]

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

DOBZHITSKIY, Yan.[Dobrzycki, Jan]; KATS, V.M.[translator]; KARTASHOV, A.K., red.; VOYKOVA, A.A., red.

[Juice purification in sugar manufacture. Translated from the Polish] Ochistka sokov v sakharnom proizvodstve. Moskva, Pishchevaia promyshlennost', 1964. 206 p. (MIRA 17:9)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VELIKAYA, Yelizaveta Ivanovna; SUKHODOL, Viktoriya Fominichna; TOMASHEVICH, Vladimir Konstantinovich. SMIRNOV, V.A., prof., retsenzent; MALCHENKO, A.L., prof., retsenzent; FERTMAN, G.I., prof., retsenzent; VOYKOVA, A.A., red.

[General methods of control in fermentation industries] Obshchie metody kontrolia brodil'nykh proizvodstv. Moskva, Pishchevaia promyshlennost', 1964. 273 p. (MIRA 17:9)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKOVA, A.A., redaktor; CHEBYSHEVA, Ye.A., tekhnicheskiy redaktor.

[Canning industry; mechanization and organization of production in canning factories] Konservnaia promyshlennost'; mekhanizatsiia i organizatsiia proizvodstva na konservnykh i ovoshchesushil'nykh zavodakh. Moskva, Pishchepromizdat. Vol. 2 1956. 161 p. (MIRA 10:5)

1. Moscow. Vsesoyuznyy nauchno-issledovatelskiy institut konservnoy promyshlennosti.
(Canning and preserving)

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Voykova, A.A.

KHENNAN, R.S. [Hannan, R.S.]; RAYSKAYA, M.G.[translator]; CHERNYAYEV, N.D. [translator]; ROGACHEV, V.I., kand.tekhn.nauk, red.; VOYKOVA, A.A., red.; CHEBYSHEVA, Ye.A., tekhn.red.

[Scientific and technological problems involved in using ionizing radiation for the preservation of food. Translated from the English] Nauchnye i tekhnologicheskie problemy primeneniia ioniziruiushchikh izluchenii dlia konservirovaniia pishchevykh produktov. Moskva, Pishchepromizdat, 1957. 278 p. (MIRA 11:4)
(Radiation sterilization)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKOVA, A.A.

ZAYTSEV, Nikolay Vladimirovich; VOYKOVA, A.A., red.; GOTLIB, E.M., tekhn. red.

[Assembling and repairing equipment used in the food industry]
Montazh i remont oborudovaniia pishchevoi promyshlennosti. Moskva, Pishchepromizdat, 1957. 335 p. (MIRA 11:5)
(Food industry--Equipment and supplies)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOYKOVA, A.A.

SERGEYEV, A.G., kand.tekhn.nauk; VOYKOVA, A.A., red.; TARASOVA, N.M., tekhn.red.

[Refining cottonseed oil] Rafinatsiia khlopkovogo masla. Moskva, Pishchepromizdat, 1959. 120 p. (MIRA 12:7)
(Cottonseed oil)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

KAGANOV, Isaak Natanovich; MIKHATOVA, Galina Nikolayevna;
VOYKOVA, A.A., red.

[Chemical and technical calculations and accounting in sugar manufacture] Khimiko-tekhnicheskie raschety i uchet v sakharnom proizvodstve. Moskva, Pishchevaia promyshlennost', 1964. 330 p. (MIRA 18:4)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

VOSTOKOV, Aleksey Izmailovich; LEPESHKIN, Ivan Pavlovich; BUDNYY, Anatoliy Vladimirovich; VOYKOVA, A.A., red.

[Calculating the technological capacity of the equipment and structures of sugar beet plants] Raschet tekhnicheskoi moshchnosti oborudovaniia i sooruzhenii sveklosakharnykh zavodov. Izd.2., perer. i dop. Moskva, Pishchevaia promyshlennost', 1965. 515 p. (MIRA 18:3)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120001-1

KUL'MAN, Avgust Gustavovich; REBINDER, P.A., akademik, red.; VOYKOVA, A.A., red.; ZARSHCHIKOVA, L.N., tekhn.red.

[Physical and colloid chemistry] Fizicheskaia i kolloidnaia khimiia. Izd.3, perer. Moskva, Pishchepromizdat, 1963. 503 p. (MIRA 17:2)

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